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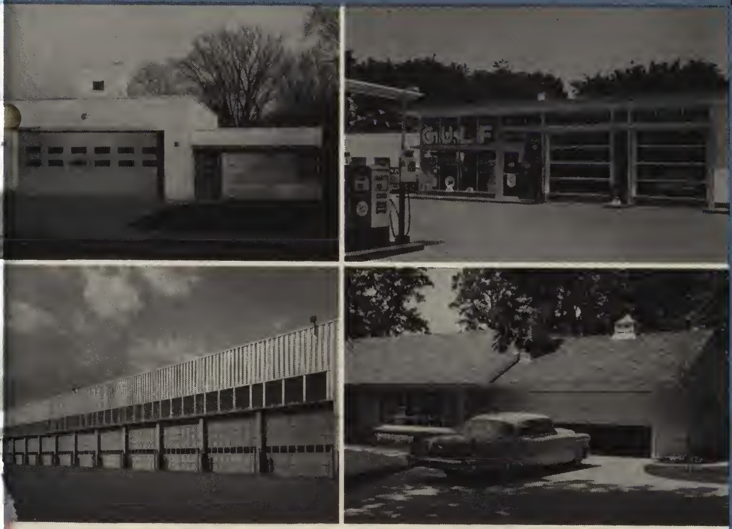
THE MARK OF QUALITY

BARBER
COLMAN

Barber-Colman
cam action
OVERdoors



commercial

industrial

service station

residential

A.I.A. File No. 16-D

OVERdoor DIVISION of BARBER-COLMAN COMPANY • ROCKFORD, ILLINOIS

THE MARK OF QUALITY

BARBER
COLMAN

the company

Founded in 1900 for the purpose of building textile machinery, Barber-Colman Company today manufactures products far reaching in their importance to commercial, industrial, and individual users. Today, Barber-Colman products include not only textile machinery, but machine tools, automatic controls, air distribution products, small motors, molded products, industrial instruments, overhead type doors, and electric operators.

Barber-Colman means engineering

Barber-Colman resarch and engineering facilities have been applied to the overhead type door and operator field since 1924 when Barber-Colman engineers first radio controlled a garage door from an automobile. In 1930 Barber-Colman developed Cam Action, an improved opening and closing mechanism for overhead type doors, and have produced a complete line of OVERdoors, Electric Operators, and Radio Controls ever since. Barber-Colman engineers have constantly pioneered improvements in overhead type doors and electric operators. A recent development, the Weather-King door section, possesses remarkable insulation qualities and excellent resistance to weathering.

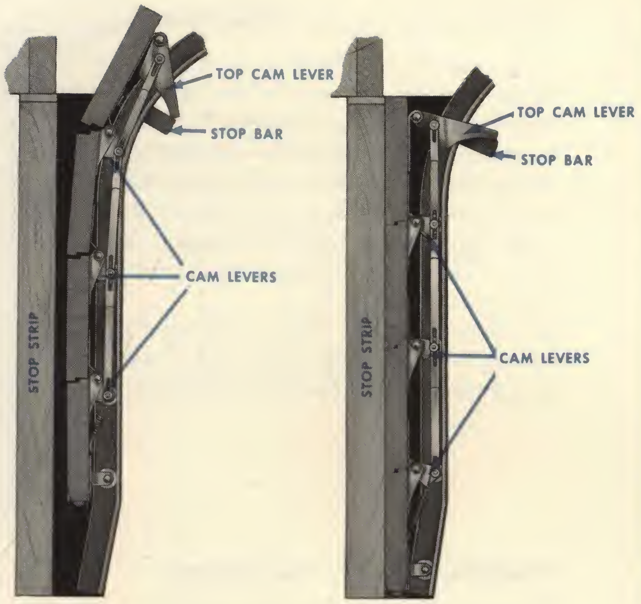
Cam Action Closing

Cam Action for overhead type doors was developed and patented by Barber-Colman engineers in 1930 as a solution to the problem of making a door close tightly enough to retain heat in a building and still operate easily.

The main advantage of the cam system is that the door is BOTH weathertight AND easy working — easy opening because the door *instantly* moves back from stop strips — weathertight closing because the door is held tight against stops. Even if the door jamb is irregular, Cam Action can be set (by changing the length of the links) to close the door snugly at all joints. Height of door sections for a given door need not be the same to effect a uniform closing. The adjustment can be easily changed after the door installation is completed.

Any door can EITHER close weathertight OR operate easily — but only a door with Cam Action does BOTH! A wedge movement door does *not* move *rapidly* back from the stops; therefore, if a wedge track door is tight when closed — it drags against the stops on opening and closing. If the wedge door has space to operate freely, that same space lets in outside air when the door is closed. If the building is not to be heated and the combination of weathertight closing and easy operating is not so important, the wedge action arrangement is satisfactory. The Model 33 is the economy OVERdoor, recommended if wedge closing is acceptable.

Barber-Colman
cam action
OVERdoors



HOW CAM ACTION WORKS

OPENING

Turning latch handle releases Cam Levers and entire door immediately moves back 3/8", then rolls up easily with minimum friction, no sticking or binding.

CLOSING

Door rolls down easily with 3/8" clearance — when door is almost down, Stop Bar on track engages Top Cam Lever, linked to other Cam Levers, pushing entire door forward and pressing door tight against stop strips.

Barber-Colman means service

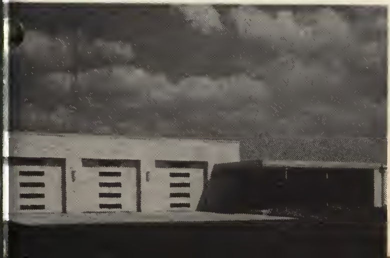
From preliminary plans to final installation, Barber-Colman engineering service assures architect and client of quality equipment designed for the particular application! Your Barber-Colman representative analyzes building requirements and co-ordinates product design with product application — his complete service includes sales contact, field engineering, liaison with factory engineering, installation, and maintenance. Barber-Colman responsibility starts with the need for doors and lasts the lifetime of the installation.

Some idea of the wide variety of applications of Barber-Colman OVERdoor equipment can be gained from this catalog. Whether your job calls for small hand operated residential doors or large electrically operated industrial doors, the Barber-Colman organization stands ready to fill the need. A specification for Barber-Colman means quality equipment backed by more than thirty years of research, engineering, and production experience.

Barber-Colman guarantees satisfaction

OVERdoors and Electric Operators carry a standard one year guarantee on all parts. Radio Control equipment is guaranteed for 90 days. WEATHER-KING panels and WEATHER-KING flush facings carry a lifetime guarantee not to split, splinter, delaminate, or crack due to natural conditions of weathering or exposure.

Barber-Colman representatives guarantee that the equipment which they sell installed will be maintained in operative condition without expense to the owner for a period of one year (90 days for Radio Control), except in case of accidental damage.



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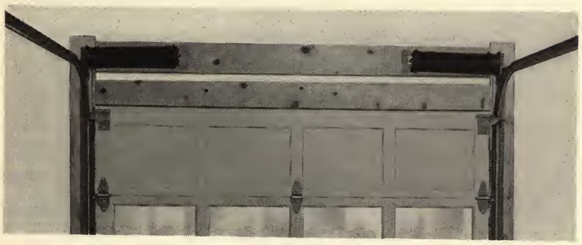
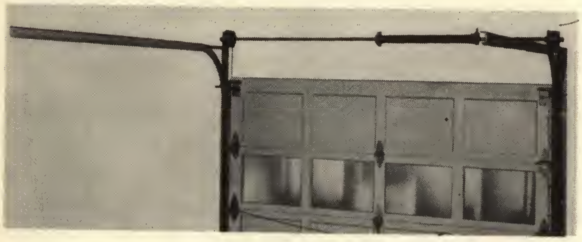
features • accessories

springs tailored to each door



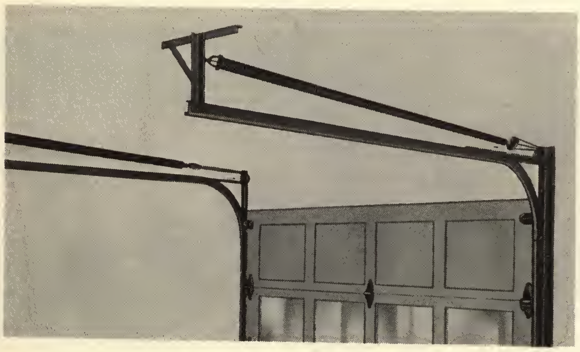
twin torsion

Standard on commercial and industrial doors over 18′-2″ wide or over 10′-6″ high. Spring on each side of door insures equal support, and allows easy adjustment to keep door in perfect balance. Cable drums are heavy cast 6″ diameter with roller bearings. Engineered for safety with steel shaft through entire length of spring assembly.



continuous shaft

Operate efficiently on smaller doors and furnished only on doors thru 18′-2″ wide and thru 10′-6″ high. Two springs used on doors over 10′-2″ wide. Cable drums are heavy cast 4½″ diameter. Engineered for safety with steel shaft mounted on ball bearings, extending entire width of door.



extension

Heavy steel spring wire with ball bearing cable sheaves to reduce friction. Wire through springs for safety. Springs offer close accuracy in design and rugged, durable service at reduced cost.

continuous track bracket

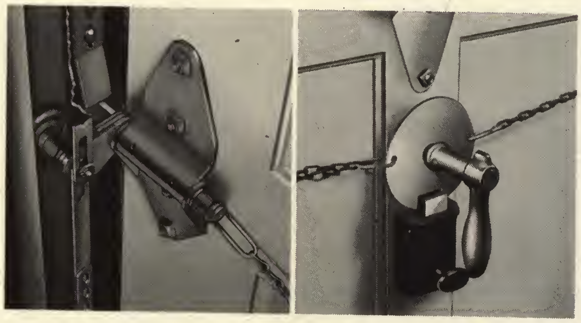
Solid, one-piece vertical track supports are furnished as standard on all Cam Action OVERdoors. The vertical track is sheet steel, rolled to a special form and spot welded to continuous angle brackets. When bolted to jamb, angle bracket reinforces the track against damage and offers solid, rigid, support throughout the full opening height of the door. The angle bracket also shields and protects the spring cable.

Horizontal tracks are reinforced by angle iron braces welded to the track and securely bolted to the continuous vertical track bracket.

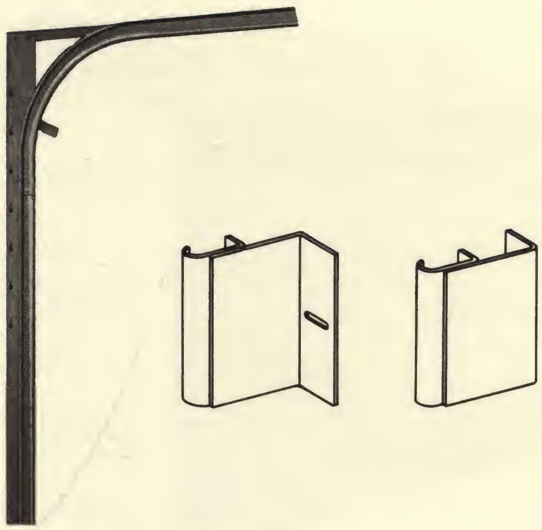
hinges • small hardware

Rugged 13 gauge steel hinge halves connected by oversize tubes provide large bearing area. All small hardware zinc plated after fabrication to resist rust and corrosion. Extra care has gone into the design of all parts — extra care that assures complete satisfaction for the owner.

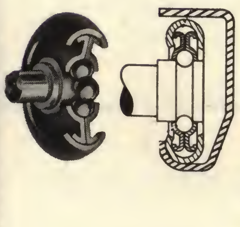
automatic latching and night lock



Spring loaded bolts automatically latch at both sides when door closes — unlatch by turning palm fitting door handle. Full size 5-pin cylinder lock with automatic night lock equipped with stop arrangement for holding out of engagement with door handle as desired.



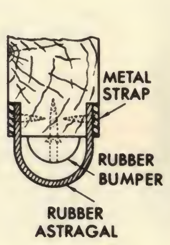
ball bearing rollers



To insure endurance and operating ease, rollers are ball bearing with a large shaft, large balls, and a large diameter ball race. Races are case hardened and balls are of specially hardened chrome steel. A one-piece steel tire formed around outside insures a rigid assembly.

rubber astragal

"U" shaped rubber astragal seals door at floor to help keep out rain and prevent freezing. Rubber bumpers inside astragal, cushion bottom of door. Made of special fabric reinforced high grade rubber and easily replaced if required. Less expensive extruded rubber nail-on type also available. Threshold should be designed to drain water away from door. Threshold footing should extend below frost line.



pass door

Pass doors are available with panel, flush, or steel sections not over 16′-6″ wide, not under 9′ high. Pass door is normally 3 sections high. Recommended width 24″, maximum width 30″.

As an added safety feature, an interlocking switch is recommended on electrically operated OVERdoors equipped with a pass door. This switch prevents opening the OVERdoor when the pass door is open.

fire station door release

The Fire Station Door Release is applicable only to Cam Action OVERdoors No. 50-02 and 50-03. The regular side latching arrangement is replaced by a latch at the top of the door. When the latch is released from a pull rope or chain (from cab of fire truck) extra tension on the springs pulls the door open rapidly. The top latch can also be released from the door handle. A brake in the horizontal track stops the door smoothly in the open position.

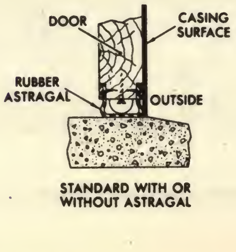
Cam Action is an important reason why the Fire Station Release gives satisfactory, dependable service. Cam Action provides instant clearance from the stops insuring fast, easy opening even when wood shrinks or swells.

steel sections

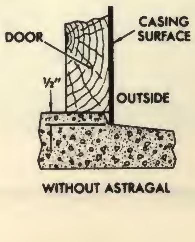
Steel Sections are used where fire or security are extreme problems. Sections are 16 gauge flush design or 20 gauge fluted design galvanized steel with edges formed for weatherproof joint. All surfaces bonderized against rust (1.25 oz. of zinc per sq. ft.) and specially treated for paint adhesion. Sections designed to withstand wind pressure of 20 pounds per sq. ft.

Any or all sections open for glazing. Glass set in steel frame with rubber mounting cushion to reduce shock. 3/16″ crystal sheet glass recommended for 16 gauge sections, double strength glass for 20 gauge sections.

threshold arrangements



STANDARD WITH OR WITHOUT ASTRAGAL



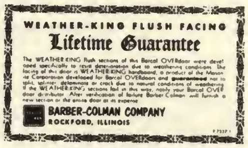
WITHOUT ASTRAGAL

WEATHER-KING flush sections

Developed by Barber-Colman Company, the WEATHER-KING flush section is the newest and best method of construction available for flush overhead type doors. Guaranteed weatherproof, WEATHER-KING flush sections have a "U" factor of .259 — twice the insulation value of a 12″ poured concrete wall. Top, bottom, and end closures are select Douglas Fir. Honeycomb core is phenolic resin impregnated against moisture and decay. WEATHER-KING flush sections are especially recommended for use with Cam Action for a perfect combination — weathertight, weatherproof, and easy working. Window inserts open for glass available in any sections. Factory primed unless otherwise specified.

lifetime guarantee

Facing guaranteed in writing not to split, splinter, delaminate, or crack due to natural conditions of weathering or exposure. If WEATHER-KING flush sections should fail in this way, Barber-Colman Company will replace section or entire door at its expense.

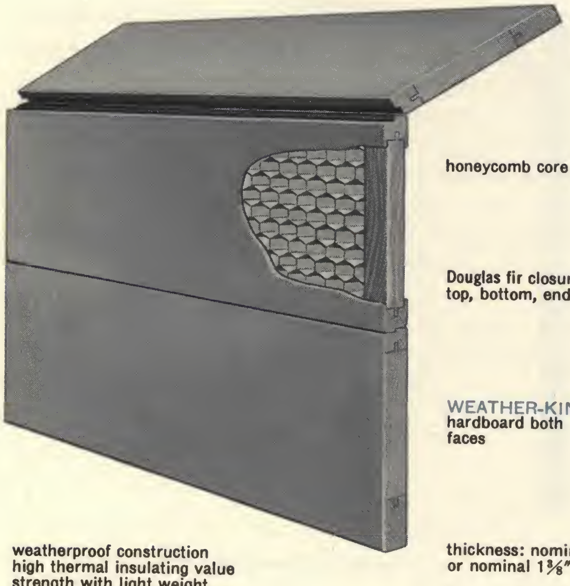


WEATHER-KING FLUSH FACING

Lifetime Guarantee

The WEATHER-KING flush sections of this Barcol OVERdoor were developed specifically to resist deterioration due to weathering conditions. The facing of this door is WEATHER-KING hardboard, a product of the Masonite Corporation developed for Barcol OVERdoors and **guaranteed** not to split, splinter, delaminate or crack due to natural conditions of weathering. If the WEATHER-KING sections fail in this way, notify your Barcol OVERdoor distributor. After verification of failure Barber-Colman will furnish a new section or the entire door at its expense.

BARBER-COLMAN COMPANY
ROCKFORD, ILLINOIS


honeycomb core
Douglas fir closures top, bottom, ends
WEATHER-KING hardboard both faces
thickness: nominal 1¾″ or nominal 1⅜″.

weatherproof construction
high thermal insulating value
strength with light weight
fire resistance
vermin and decay resistance
modern design—door may be *individualized.*

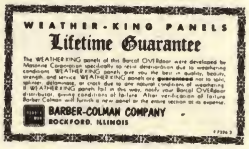
WEATHER-KING panel sections

Introduced to the overhead type door industry by Barber-Colman Company, WEATHER-KING panels combine the advantages of plywood and metal without the disadvantages of either. WEATHER-KING panels are guaranteed to withstand all natural conditions of weathering and exposure. Rails and stiles are select Douglas Fir. Available in any size or design, WEATHER-KING panel sections are applicable for every residential, commercial, and industrial need.

Rails and stiles nominal 1¾″ thick, select Douglas Fir. Joints mortise and tenon glued, and steel pinned from inside. Nominal ¼″ thick WEATHER-KING panels standard. Required stop strips furnished. Sections sanded ready for paint. Any or all sections may be open for glazing.

lifetime guarantee

Panels guaranteed in writing not to split, splinter, delaminate, or crack due to natural conditions of weathering or exposure. If WEATHER-KING panel sections should fail in this way, Barber-Colman Company will replace section or entire door at its expense.

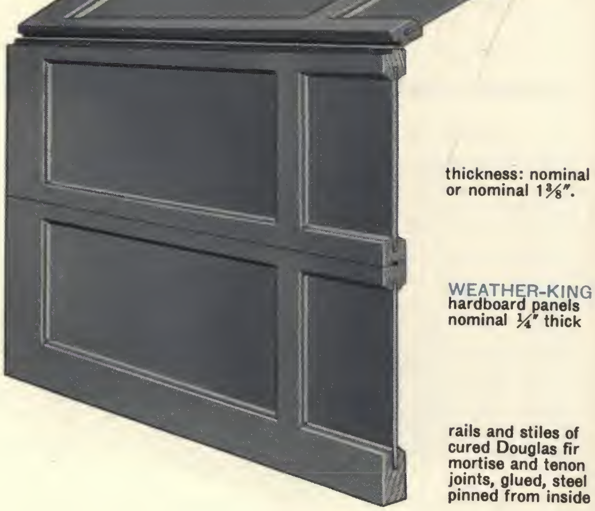


WEATHER-KING PANELS

Lifetime Guarantee

The WEATHER-KING panels of this Barcol OVERdoor were developed by Masonite Corporation specifically to resist deterioration due to weathering conditions. WEATHER-KING panels give you the best in quality, beauty, strength and service. WEATHER-KING panels are **guaranteed** not to split, splinter, delaminate, or crack due to any natural conditions of weathering. If WEATHER-KING panels fail in this way, notify your Barcol OVERdoor distributor, giving conditions of failure. After verification of failure Barber-Colman will furnish a new panel or the entire section at its expense.

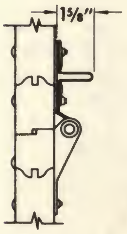
BARBER-COLMAN COMPANY
ROCKFORD, ILLINOIS

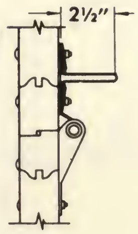

thickness: nominal 1¾″ or nominal 1⅜″.
WEATHER-KING hardboard panels nominal ¼″ thick
rails and stiles of cured Douglas fir mortise and tenon joints, glued, steel pinned from inside

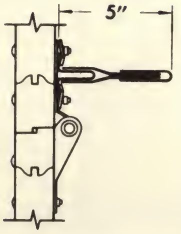
WEATHER-KING flush sections

door height	no./sec.
up thru 8'6"	4
8'7" thru 10'6"	5
10'7" thru 12'6"	6
12'7" thru 14'6"	7
14'7" thru 16'6"	8
16'7" thru 18'6"	9

door width	hinges /break
up thru 9'6"	3
9'7" thru 14'6"	4
14'7" thru 18'6"	5
18'7" thru 22'6"	6
22'7" thru 26'6"	7
26'7" thru 28'2"	8







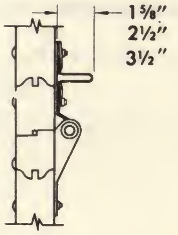
reinforcing

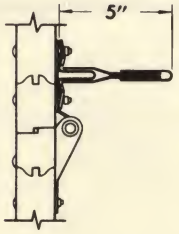
The correct number, size, and style of reinforcing struts are furnished with each door. Placement of the struts depends upon the size of the door and are correctly installed by trained door specialists at the time the door is installed.

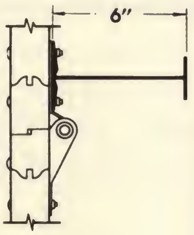
WEATHER-KING panel sections

door height	no./sec.
up thru 8'6"	4
8'7" thru 10'6"	5
10'7" thru 12'6"	6
12'7" thru 14'6"	7
14'7" thru 16'6"	8
16'7" thru 18'6"	9

door width	panels	hinges /break
up thru 9'6"	4	3
9'7" thru 14'6"	6	4
14'7" thru 18'6"	8	5
18'7" thru 22'6"	10	6
22'7" thru 26'6"	12	7
26'7" thru 28'2"	14	8







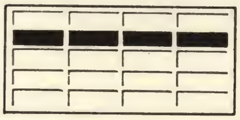
reinforcing

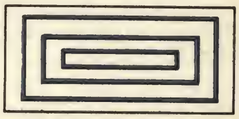
The correct number, size, and style of reinforcing struts are furnished with each door. Placement of the struts depends upon the size of the door and are correctly installed by trained door specialists at the time the door is installed.

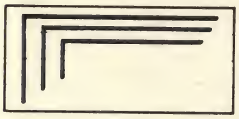
individualized doors

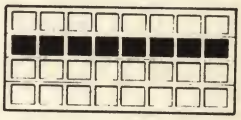
Barber-Colman OVERdoors are furnished in a wide variety of designs to complement any type of home whether it be ranch, colonial, modern, or provincial. A broad selection of panel and flush designs offers real individuality, especially when *Door*naments and moulding are used to add extra personality and style.

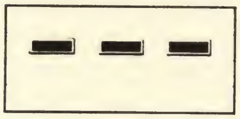
Flush doors offer the greatest possibilities for "main entrance" styling — either to blend and conform with the architecture of the home or to create a striking effect as an accent in the overall design. Barber-Colman design facilities make custom-designed garage doors available at only slightly more than the cost of standard doors. Architects have achieved an amazing variety of attractive door designs by using Doornaments, molding, paint, and window inserts. The drawings below indicate only a few of the unlimited design possibilities.

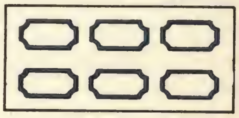




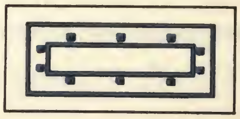


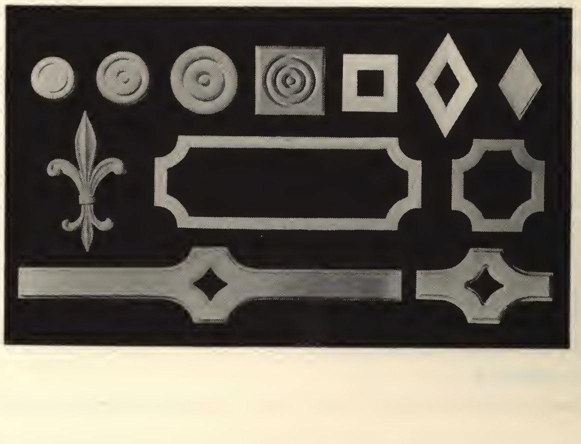






Doornaments
Barber-Colman representatives have a wide variety of Doornaments including the standard styles shown here. They can be quickly applied to any door — offering unlimited design opportunities.



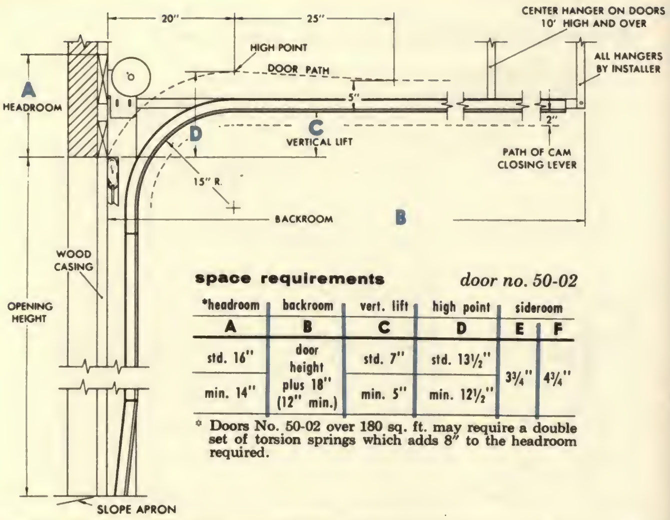


2" track standard

cam action

DOOR	SPRINGS	*max.* DOOR AREA	*max.* WIDTH	*max.* HEIGHT
50-02	torsion	265 sq. ft.	20'-2"	20'-1"

Door No. 50-02 is the basic Barber-Colman Cam Action OVERdoor with sturdy hardware designed for residential and most commercial-industrial applications, from small dock doors to large railway doors. When combined with Weather-King Flush Sections, Cam Action OVERdoors provide a weathertight seal, high insulation and easy operation. Most standard sizes carried in stock by representatives.



space requirements *door no. 50-02*

*headroom	backroom	vert. lift	high point	sideroom	
A	B	C	D	E	F
std. 16"	door height plus 18" (12" min.)	std. 7"	std. 13½"	3¾"	4¾"
min. 14"		min. 5"	min. 12½"		

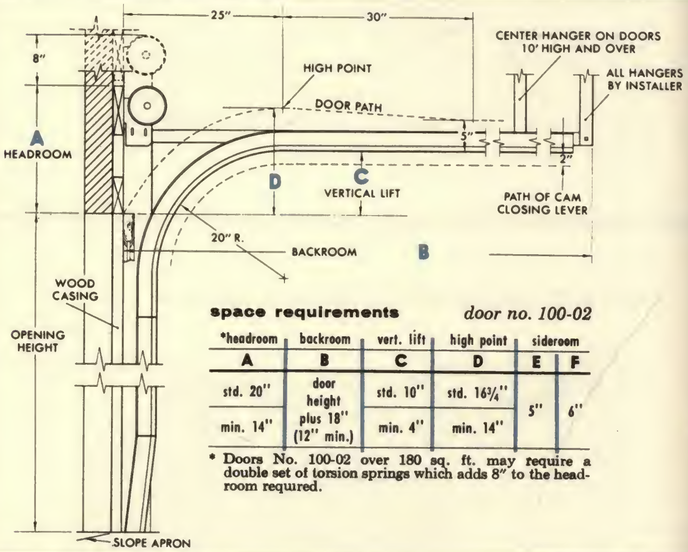
* Doors No. 50-02 over 180 sq. ft. may require a double set of torsion springs which adds 8" to the headroom required.

3" track standard

cam action

DOOR	SPRINGS	*max.* DOOR AREA	*max.* WIDTH	*max.* HEIGHT
100-02	torsion	400 sq. ft.	28'-2"	21'-7"

Door No. 100-02 is an extra heavy duty Cam Action OVERdoor specially engineered for extremely large openings. This OVERdoor has large 3" diameter rollers, extra heavy gauge track and hinges. It is ideal for applications where heavy sections are required and constant operation is a factor.



space requirements *door no. 100-02*

*headroom	backroom	vert. lift	high point	sideroom	
A	B	C	D	E	F
std. 20"	door height plus 18" (12" min.)	std. 10"	std. 16¾"	5"	6"
min. 14"		min. 4"	min. 14"		

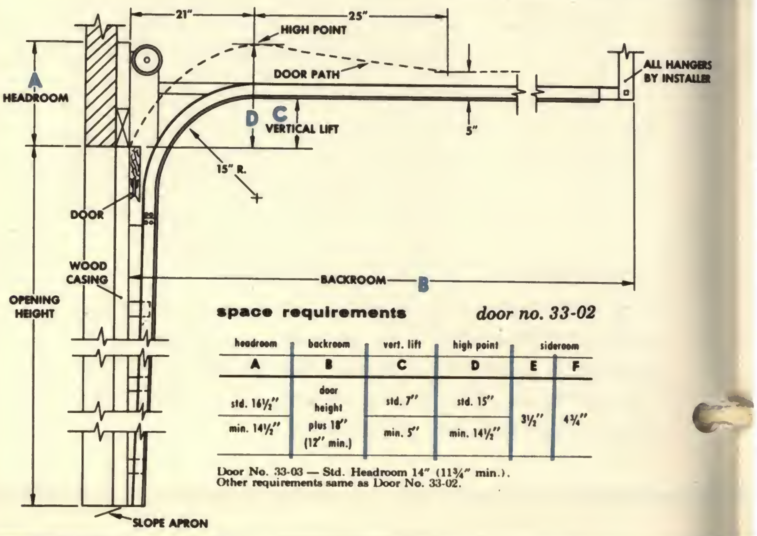
* Doors No. 100-02 over 180 sq. ft. may require a double set of torsion springs which adds 8" to the headroom requred.

2" track standard

wedge closing

DOOR	SPRINGS	*max.* DOOR AREA	*max.* WIDTH	*max.* HEIGHT
33-02	torsion	265 sq. ft.	20'-2"	20'-1"
33-03	extension	112 sq. ft.	16'-0"	7'-0"

Door No. 33-02 is the Barber-Colman economy model. This wedge closing OVERdoor has every Barber-Colman quality feature except Cam Action and is intended primarily for residential and light commercial-industrial applications. Door No. 33-03 is identical in construction except extension springs are furnished instead of torsion. Wedge closing is satisfactory if the combination of weathertight closing and easy operation is not so important.

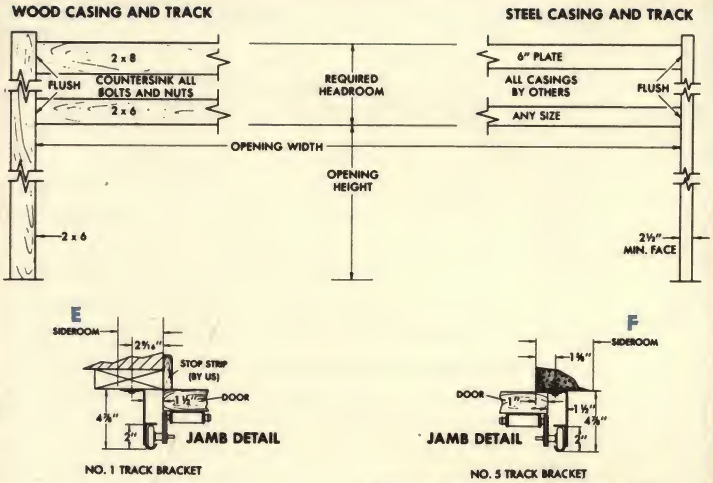


space requirements *door no. 33-02*

headroom	backroom	vert. lift	high point	sideroom	
A	B	C	D	E	F
std. 16½"	door height plus 18" (12" min.)	std. 7"	std. 15"	3½"	4¾"
min. 14½"		min. 5"	min. 14½"		

Door No. 33-03 — Std. Headroom 14" (11¾" min.).
Other requirements same as Door No. 33-02.

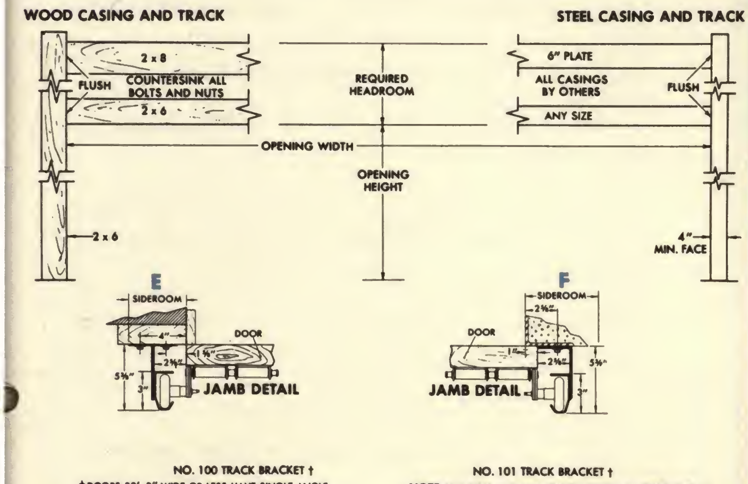
Barber-Colman
cam action
OVERdoors



NOTE: FOR STEEL CASINGS, SPECIFY DOORS 2" WIDER AND 1" HIGHER THAN OPENING SIZE. DOOR OVERLAPS OPENING 1" AT EACH SIDE AND TOP.

specification

Doors shall be Standard Cam Action OVERdoor No. 50-02 with WEATHER-KING flush (or panel) sections as manufactured by Barber-Colman Company, and shall be of a size and design shown on the plans. They shall have torsion spring counterbalancing, latching type lock, and continuous vertical track brackets. Door openings shall be cased by others. Doors shall be installed by the local representative of Barber-Colman OVERdoors.
OPTIONAL: Rubber astragal in form of upright "U" on bottom of door for full width. Toxic treatment of panel sections before delivery.

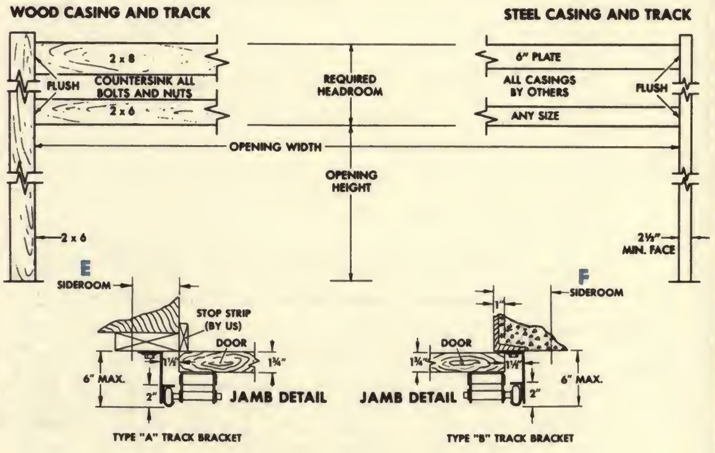


† DOORS 20'- 2" WIDE OR LESS HAVE SINGLE ANGLE BRACKETS AND SINGLE SIDE HINGES.

NOTE: FOR STEEL CASINGS, SPECIFY DOORS 2" WIDER AND 1" HIGHER THAN OPENING SIZE. DOOR OVERLAPS OPENING 1" AT EACH SIDE AND TOP.

specification

Doors shall be Standard Cam Action OVERdoors No. 100-02 with WEATHER-KING flush (or panel) sections as manufactured by Barber-Colman Company, and shall be of a size and design as shown on the plans. They shall have torsion spring counterbalancing, latching type lock, and 3″ track with continuous vertical brackets. Door openings shall be cased by others. Doors shall be installed by the local representative of Barber-Colman OVERdoors.
OPTIONAL: Rubber astragal in form of upright "U" on bottom of door for full width. Toxic treatment of panel sections before delivery.



NOTE: FOR STEEL CASINGS, SPECIFY DOORS 2" WIDER AND 1" HIGHER THAN OPENING SIZE. DOOR OVERLAPS OPENING 1" AT EACH SIDE AND TOP.

†TYPE B AVAILABLE FOR ALL 1¾" DOORS AND FOR 1⅜" DOORS IF NOT OVER 10' WIDE AND NOT OVER 7' HIGH.

specification

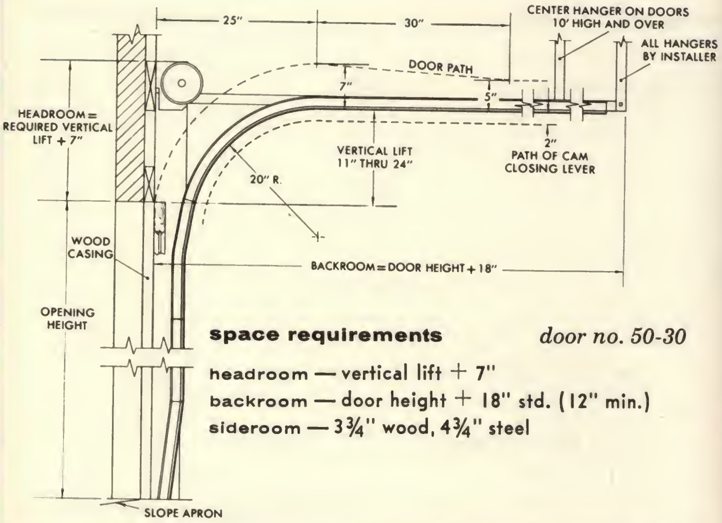
Doors shall be Standard Wedge Action OVERdoors No. 33-02 with WEATHER-KING flush (or panel) sections as manufactured by Barber-Colman Company, and shall be of a size and design shown on the plans. They shall have torsion springs counterbalancing and latching type lock. Door openings shall be cased by others. Doors shall be installed by the local representative of Barber-Colman OVERdoors.
OPTIONAL: Rubber astragal on bottom of door for full width. Toxic treatment of panel sections before delivery.

small lift

cam and wedge

DOOR	SPRINGS	VERT. LIFT	*max.* WIDTH	*max.* HEIGHT
50-30	torsion	11" thru 24"	10'-6"	12'-6"
33-30	torsion	11" thru 24"	10'-6"	12'-6"

Door No. 50-30 provides up to 24″ of vertical lift over the door height allowing clearance for greasing lifts, fork lift trucks, and other such equipment. Door No. 33-30 is identical in construction except Wedge Closing is furnished instead of Cam Action and intermittent instead of continuous track brackets. If required door height exceeds the above limits, Dummy Section Doors 50-46 or 33-46 may be substituted. With this arrangement, additional vertical clearance is obtained by adding dummy sections to the top of the door.


25"
30"
CENTER HANGER ON DOORS 10' HIGH AND OVER
ALL HANGERS BY INSTALLER
DOOR PATH
7"
5"
2" PATH OF CAM CLOSING LEVER
HEADROOM = REQUIRED VERTICAL LIFT + 7"
VERTICAL LIFT 11" THRU 24"
20" R.
WOOD CASING
BACKROOM = DOOR HEIGHT + 18"
OPENING HEIGHT
SLOPE APRON

space requirements *door no. 50-30*

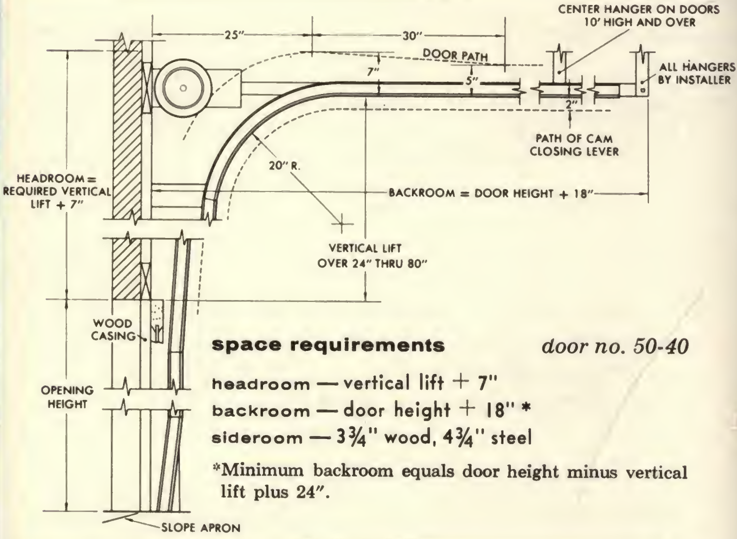
headroom — vertical lift + 7"
backroom — door height + 18" std. (12" min.)
sideroom — 3¾" wood, 4¾" steel

high lift

cam and wedge

DOOR	SPRINGS	*max.* DOOR AREA	*max.* WIDTH	*max.* HEIGHT
50-40	torsion	265 sq. ft.	20'-2"	16'-1"
33-40	torsion	265 sq. ft.	20'-2"	16'-1"

Door No. 50-40 provides up to 80″ of vertical lift over the door height allowing clearance for greasing lifts, pipes, fork lift trucks, traveling cranes, and other such equipment. Door No. 33-40 is identical in construction except Wedge Closing is furnished instead of Cam Action and intermittent instead of continuous track brackets. If required door height exceeds 16′1″, or if vertical lift exceeds 80″, Dummy Section Doors 50-46 or 33-46 may be substituted. This increases total door height to clear obstructions and permits use of standard drawbar ,electric operation.


25"
30"
CENTER HANGER ON DOORS 10' HIGH AND OVER
ALL HANGERS BY INSTALLER
DOOR PATH
7"
5"
2"
PATH OF CAM CLOSING LEVER
HEADROOM = REQUIRED VERTICAL LIFT + 7"
20" R.
BACKROOM = DOOR HEIGHT + 18"
VERTICAL LIFT OVER 24" THRU 80"
WOOD CASING
OPENING HEIGHT
SLOPE APRON

space requirements *door no. 50-40*

headroom — vertical lift + 7"
backroom — door height + 18" *
sideroom — 3¾" wood, 4¾" steel

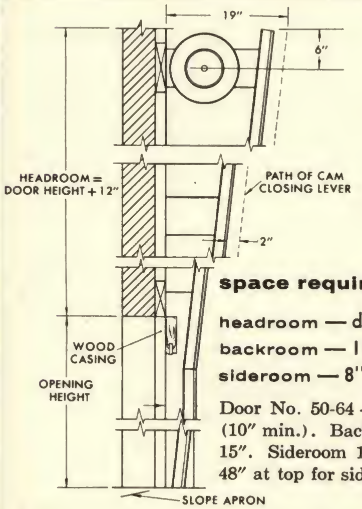
*Minimum backroom equals door height minus vertical lift plus 24″.

full vertical

cam and wedge

DOOR	COUNTER-BALANCE	*max.* DOOR AREA	*max.* WIDTH	*max.* HEIGHT
50-60	torsion spring	200 sq. ft.	16'-2"	12'-3"
33-60	torsion spring	200 sq. ft.	16'-2"	12'-3"
50-64	weight	265 sq. ft.	18'-2"	20'-1"

Doors 50-60 and 33-60 operate vertically and require only 19″ of backroom. Where larger doors are required, Full Vertical Cam Action Door No. 50-64 is suggested. Door No. 50-64 operates vertically, requires only 8″ backroom, except top 10″ which requires 15″, must be electrically operated. Doors 50-60 and 33-60 are identical in construction except Door No. 50-60 has Cam Action Closing and continuous track bracket. Full Vertical Weight Counterbalanced Door No. 50-64 is available with Cam Action Closing only.



space requirements *door no. 50-60*

headroom — door height + 12" (8" min.)
backroom — 19"
sideroom — 8" wood, 7½" steel

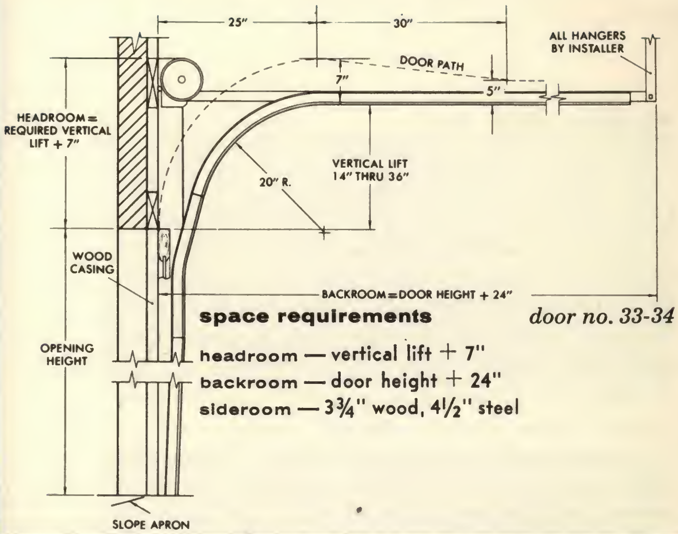
Door No. 50-64 — Std. headroom door height plus 15″ (10″ min.). Backroom 8″ except top 10″ which requires 15″. Sideroom 15″ weight guard side, 2¾″ other side, 48″ at top for side mounted operator.

Barber-Colman
cam action
OVERdoors

service station *wedge closing*

DOOR	SPRINGS	VERT. LIFT	*max.* WIDTH	*max.* HEIGHT
33-34	torsion	14" thru 36"	10'-6"	10'-6"

Door No. 33-34 is a wedge closing OVERdoor designed for service stations and other applications where vertical clearance is required and wedge closing is acceptable. This door provides up to 36″ of vertical lift to provide clearance for greasing lifts and wash racks. Section designs are available to meet any service station requirement.


25″
30″
ALL HANGERS BY INSTALLER
DOOR PATH
7″
5″
HEADROOM = REQUIRED VERTICAL LIFT + 7″
VERTICAL LIFT 14″ THRU 36″
20″ R.
WOOD CASING
BACKROOM = DOOR HEIGHT + 24″
OPENING HEIGHT
SLOPE APRON

space requirements *door no. 33-34*

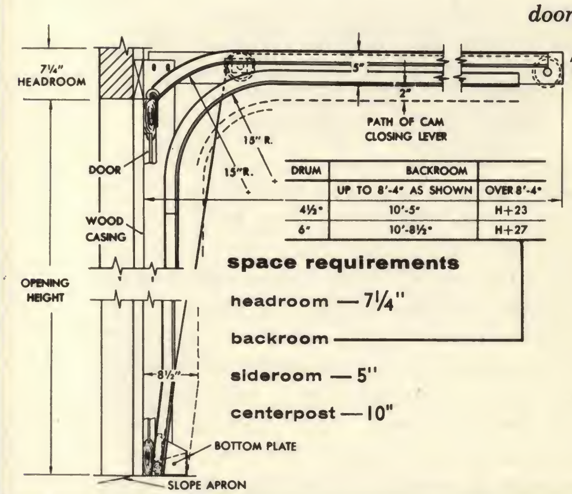
- headroom — vertical lift + 7"
- backroom — door height + 24"
- sideroom — 3¾" wood, 4½" steel

low headroom *cam and wedge*

DOOR	SPRINGS	*max.* DOOR AREA	*max.* WIDTH	*max.* HEIGHT
50-22	torsion	160 sq. ft.	18'-2"	12'-1"
33-22	torsion	160 sq. ft.	18'-2"	12'-1"

Doors 50-22 and 33-22 are designed for installations where minimum headroom is available. Both doors are identical in construction except Door No. 50-22 has Cam Action Closing and continuous track brackets. Doors will clear the opening in the open position, but do not operate quite as smoothly as standard arrangements.

door no. 50-22



DRUM	BACKROOM	
	UP TO 8'-4" AS SHOWN	OVER 8'-4"
4½"	10'-5"	H+23
6"	10'-8½"	H+27

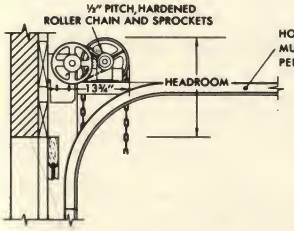
space requirements

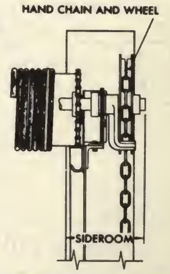
- headroom — 7¼"
- backroom
- sideroom — 5"
- centerpost — 10"

chain hoist *spring drive*

The Spring Drive Chain Hoist is installed with original door installations and is recommended for easier operation of OVERdoors which exceed 12′-6″ high or 200 sq. ft. area.

The cable winding drums are driven through a ball bearing mounted cross shaft, sprocket and chain linkage. This arrangement exerts a positive pulling force on the door when opening. The door moves 4″ for every foot of chain travel. On doors with a double set of springs, the lower set is driven by the chain hoist. The hand chain drive may be mounted on either the right or left hand side. For locking, a hook is furnished to fasten the chain to the track bracket.


½″ PITCH, HARDENED ROLLER CHAIN AND SPROCKETS
HORIZONTAL TRACKS MUST SLOPE UP ½″ PER FOOT.
13¾″
HEADROOM



space requirements

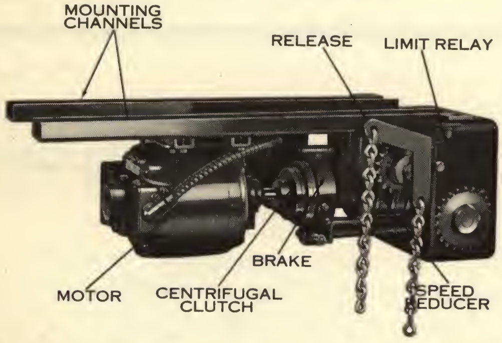
DOOR		50-02	100-02	50-40	50-60
headroom		19"	23"	door headroom	
backroom		door backroom			
side- room	wood	6½"	7¾"	6"	6"
	steel	7½"	8¾"	7"	7"

May also be used on Doors 33-02, 33-40, and 33-60.

models MR, MC

arrangement no. 1

The Model MR (shown below) for commercial-industrial overhead type doors is usually controlled by momentary contact of a three-button (Open-Close-Stop) switch, and has a magnetic brake that stops the door accurately and locks it in any position that it stops. The clutch is of the centrifugal type which allows the motor to come up to speed before taking on the driving load. If the door meets an obstruction the clutch slips. A simple release permits manual operation in case of power failure. A thermal circuit breaker provides protection in case of overload.



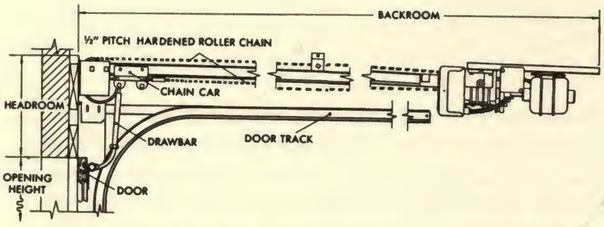
The Model MC is identical to the Model MR except for the control. Controlled from a two-button switch, the Model MC provides maximum protection where considerable traffic moves through the door. Short contact of "Open" button opens door. Attendant must hold "Close" button during entire closing stroke; merely releasing the "Close" button reverses the door and sends it back open automatically.

Furnished for 110 volt, 60 cycle, single phase A.C., and for 220 or 440 volt, 60 or 50 cycle, three phase A.C. Motors for 25 cycle also available. Motor sizes ¼ h.p. to ½ h.p. for standard weight doors up to 400 sq. ft. in area.

specification

Door operators shall be Model MR (or MC) as manufactured by Barber-Colman Company. They shall have G.E. or Westinghouse (or equal) instantly-reversing motors, centrifugal clutch, worm gear speed reducer, magnetic brake, limit switch, thermal circuit breaker, and release for manual operation. Control shall be by switches located as shown on plans.

(Include in electrical specification) Provide power outlet and install thermal circuit breaker and control station (both furnished) next to door as shown on plans. Do all wiring from power source through circuit breaker to operator and to control stations in accordance with wiring diagram furnished by Barber-Colman representative.



space requirements

DOOR	OPERATOR HEADROOM	OPERATOR BACKROOM
50-02 **100-02** **33-02**	door high point plus 3¾"	door headroom plus 5'2"
50-22, 33-22	door headroom	
50-30 **33-34**	door headroom plus 3"	
50-46, 33-46	door headroom	

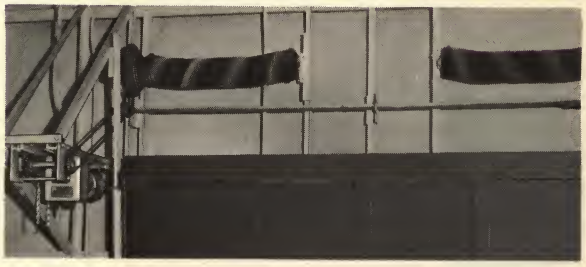
models LR, LC

arrangement no. 7

The Model LR is a modified Model MR operator engineered for commercial and light industrial overhead type doors up to 19′2″ wide and not over 240 sq. ft. area. Standard control is from three-button (Open-Close-Stop) switch. The Model LC is identical to the Model LR except the control is from a two-button switch of the type used on the Model MC. Low voltage to the control station is standard. Standard motors are ⅓ h.p., 110 volt, single phase A.C. or ⅓ h.p., 220 volt, three-phase A.C.

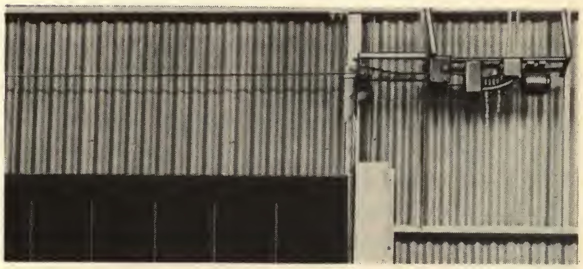
full vertical - spring *arrangement no. 5*

Model MR only for operation of Doors 50-60 and 33-60. Operator controls door by driving cable drums. Sizes ¼ h.p. and ⅓ h.p. Backroom = 36″ from face of door. Sideroom = 16½″ from door opening. Door headroom sufficient.



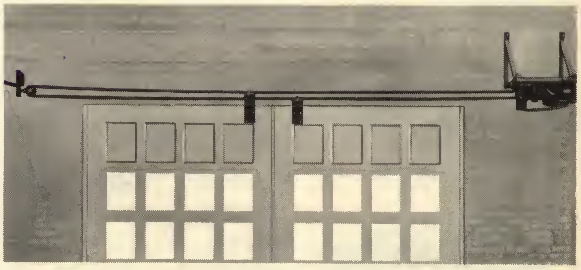
full vertical - weight *arrangement no. 6*

Model MR only for operation of Door No. 50-64. Electric operation of weight counterbalanced doors is highly important to reduce breakage due to slamming. Sizes ¼ h.p. to ½ h.p. for standard weight doors up to 265 sq. ft. Backroom = 15″ from face of door. Sideroom = 48″ from door opening. Headroom = 15″ above top of door in open position.



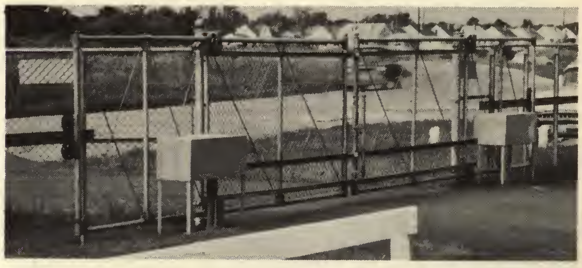
sliding door *arrangement no. 8*

Models MR and MC for one-leaf sliding and two-leaf sliding abutting doors. Sizes ¼ h.p. to ½ h.p. for standard weight doors up to 400 sq. ft., openings not over 20′ wide. Backroom = 13″ from face of door. Sideroom = 44″ from door opening. Headroom = 7″ from top of door.



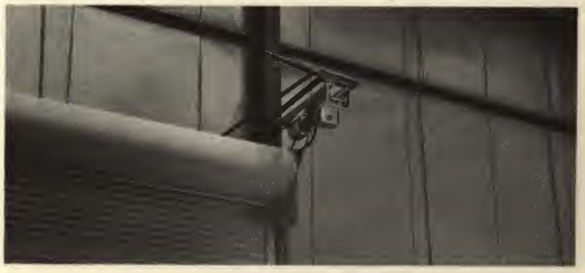
sliding gate *arrangement no. 9*

Models MR and MC for sliding gates. One operator required for each leaf. Sizes ¼ h.p. to ½ h.p. for standard weight gates up thru 30 ft. wide, 7 ft. high. Backroom = 19″ from gate mesh. Height = 37″ from concrete base set at ground level. Operator sideroom = 50″ from opening. Gate travel clearance = width of leaf plus 30″.



steel rolling door *arrangement no. 11*

Models MR and MC for steel rolling doors. Location of operator and driving arrangement can be altered to suit conditions of job. Sizes ¼ h.p. to ½ h.p. Maximum door size varies with conditions. Backroom = 60″ from door face. Sideroom = door sideroom plus 16″. Door headroom sufficient.



controls

3 button switch

models MR, LR

Open-Close-Stop momentary contact switch, furnished as standard on Models MR and LR Operators. Normally operates on same voltage as operator motor. Any number of additional switches can be installed.

safety control

models MC, LC

Safety control furnished as standard on Models MC, LC, operator. Requires only momentary contact of "Open" button. "Close" button must be held until door is completely closed. Door automatically reverses if "Close" button is released. Any number of additional switches can be installed.

ratchet relay

models MR, LR

Normally open, single contact, self-restoring switch. Furnished as standard on Models MR, LR, operators, equipped with Ratchet Relay Control. One switch opens, closes, and reverses the door. Any number of additional switches can be installed.

radio control

model B

Barber-Colman Company invented and developed Radio Controls for garage doors in 1924. The latest design is a straight electronic type. It is a compact unit, easy to install and engineered for rugged, dependable duty. Commercial applications include service and delivery truck, ambulance, police and fire vehicles.

Control consists of a radio transmitter mounted on each vehicle and a receiving set on the operator. When the control button is pressed, a radio signal is sent out by the transmitting set, which consists of a high carrier frequency and a lower modulating frequency. This signal is picked up by the receiving set where it is analyzed. If it is the matching signal and of sufficient duration, the door opens if closed, closes if open, and reverses if closing or opening. Normal range is about 75 feet. The standard receiver is for use on 110 volt A.C. 60 or 50 cycle — preferably 60 cycle.

Barber-Colman

cam action

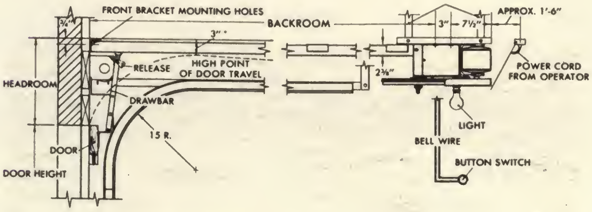
OVERdoors

residential operator *model J*

The Model J is a simplified residential door operator designed for maximum safety and convenience. It is applicable to standard overhead-type doors up to 133 sq. ft., not to exceed 19′ wide and 8′6″ high. For standard one-piece upward acting doors of both the track type and the pivot-receding type not to exceed 16′ wide and 7′ high. The operator is equipped with an adjustable spring loaded clutch. If the door meets an obstruction, the clutch slips, stopping door — operator shuts off. A touch on control button reverses door — operator automatically resets itself. A light on the operator goes on when the door is opened and stays on until door is closed. A button switch and low voltage wire are provided for inside installation. Radio Control is normally used for outside control, but an outside key switch is available.

In case of power failure, operator draw bar can be easily disconnected for manual operation.

The motor is ¼ h.p. instantly reversing, permanent capacitor type, 115 volt, 60 cycle, single phase A.C. A built in thermal circuit breaker protects motor in case of overloading.



space requirements

door	operator headroom
50-02, 33-02	add 3″ to door high point
50-22, 33-22	add 3″ to headroom

backroom — doors thru 7′ high — 9′-2¾″
7′-1″ thru 8′-6″ — 10′-8¾″

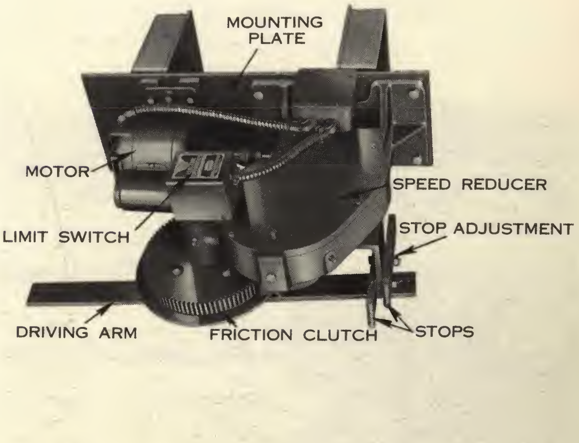
swinging door operator *models VR and VC*

The Model VR operator is a heavy duty unit for 1, 2, 3, and 4 leaf inward swinging doors and for 1 leaf outward swinging doors. The Model VR is normally controlled by a 3 button (Open-Close-Stop) momentary contact switch. Any number of additional switches may be installed. To assure safety, an adjustable friction clutch is provided in the drive between the slow speed shaft and driving arms. The clutch will slip when the normal driving load is exceeded by more than a reasonable amount.

The Model VC is identical to the Model VR except for the control. Controlled from a two-button switch, the Model VC provides maximum protection where considerable traffic moves through the door. Short contact of "Open" button opens door. Attendant must hold "Close" button during entire closing stroke; merely releasing the "Close" button reverses the door and sends it back open automatically.

The operators are installed alike on 2-3 and 4 leaf inward swinging doors. Application to 1 leaf outward or inward swinging doors is somewhat different and requires but one driving arm.

Instantly reversing, the motors are furnished for 110 volt, 60 cycle, single phase A.C., and for 220 or 440 volts, 60 or 50 cycle, three phase A.C. Motors for 25 cycle available at extra cost.



Barber-Colman
cam action
OVERdoors

ALABAMA
Birmingham—The Conarc Co., Inc.
Montgomery—The Morton Sales Co., Inc.
(Chattanooga)

ARIZONA
Phoenix—Laing-Garrett Construction Spec.

ARKANSAS
(Tulsa)

CALIFORNIA
Fresno—Healey & Popovich
Los Angeles—Barcol OVERdoors of Los Angeles
San Diego—Vinyard Overhead Garage Door Co.
San Francisco—R. A. Parker Co.

COLORADO
Denver—C. A. Crosta, Inc.

CONNECTICUT
Clinton—Middlesex Overhead Door Co.
Torrington—Vincent Colucci
Waterbury—J. E. Smith & Co.
(Framingham, Tarrytown)

DELAWARE
(Philadelphia)

DISTRICT OF COLUMBIA
Washington, D.C. (Bethesda, Md.)—W. M. Schoenfelder

FLORIDA
Bradenton (Palmetto)—Barcol OVERdoors of W. Fla.
Jacksonville—Builders Products Co.
Miami—Barcol OVERdoors of Miami
Tallahassee—Simpson-McCord Co.
West Palm Beach—Harold Gordon

GEORGIA
Atlanta—Industrial Equipment Co.
Augusta—Maner Bldrs. Supply Co., Inc.
(Chattanooga, Jacksonville, Tallahassee)

IDAHO
Boise—Wholesalers, Inc.
(Butte, Salt Lake City, Spokane)

ILLINOIS
Chicago—E. H. Kietzman Co.
Crystal Lake—Scotty's Barber-Colman OVERdoors
Decatur—Barcol OVERdoors of Decatur
DeKalb—Barcol OVERdoors of DeKalb
Elgin—Keegan Bros. Mfg. Co.
Freeport—Barcol OVERdoors of Freeport
Moline—Builders Sales & Service Co.
Ottawa—Fred Scherer, Inc.
Peoria—Russell E. Kauffman
Rockford—Barber-Colman Company
Sheffield—Sheffield Doors, Inc.
Springfield—Allied Builders Supply Co.
Wyanet—Barber-Colman OVERdoor Sales Co.
(Dubuque, Evansville, Ind., St. Louis)

INDIANA
Evansville—Barcol OVERdoors of Evansville
Fort Wayne—Roethele Bldg. Materials, Inc.
Indianapolis—McComb Window & Door Co.
South Bend—Barber-Colman OVERdoors of South Bend
(Chicago, Cincinnati, Louisville)

IOWA
Cedar Rapids—Kelleys, Inc.
Des Moines—Barber-Colman Company
Dubuque—Barcol OVERdoors of Dubuque
Ft. Dodge—Barber-Colman OVERdoors of Ft. Dodge
Sioux City—Fonda F. Rock Co.
(Moline, Sioux Falls, S.D.)

KANSAS
Hutchinson—Supply Service, Inc.
Wichita—Supply Service, Inc.
(Kansas City, St. Joseph)

KENTUCKY
Lexington—E. H. Straus Co.
Louisville—Barcol OVERdoors of Louisville
(Cincinnati, Evansville, Huntington)

LOUISIANA
Baton-Rouge—Reynolds Bldg. Material Co.
New Orleans—J. T. Mann & Co.

MAINE
Caribou—H. A. Briggs & Son
Portland—Overdoors Installation Co.

MARYLAND
Cumberland—Buchanan Lumber Co.
(Washington, D.C., Winchester, Va.)

MASSACHUSETTS
Danvers—Riley Door & Window Co.
Framingham—Barber-Colman Company
Lenox—Berkshire Screen Co.
Taunton—Barcol OVERdoors of Taunton
Ware—A. J. Madigan
Worcester—J. R. Richards Co.

MICHIGAN
Adrian—Adrian Home Improvement Co.
Albion—Leon Claucherty & Son
Battle Creek—Barber-Colman OVERdoors of Battle Creek
Bay City—Laurence Smith
Detroit—Barber-Colman Company
Flint—Kelly Concrete, Inc.
Grand Rapids—Barcol OVERdoors of Grand Rapids
Jackson—Barber-Colman OVERdoors of Jackson
Kalamazoo—Barcol OVERdoors of Kalamazoo
Lansing—C. H. Rider & Son
Lapeer—McCormick Bldg. Supply Corp.
Milford—Barber-Colman OVERdoors of Milford
Mt. Clemens—Bill Carter Supplier
Novi—Barber-Colman OVERdoors of Novi
Owosso—West Side Lumber
Pontiac—D & M Bldg. Service
Port Huron—Barber-Colman OVERdoors of Port Huron
Saginaw—See Bay City
Ypsilanti—Building Specialties & Equipment Co.
(South Bend, Toledo, Green Bay, Wausau, Wis.)

MINNESOTA
Alexandria—Alexandria Lbr. Co.
Austin—Austin Allied Aluminum Co.
Benson—McCarthy Lumber Co.
Detroit Lakes—Wilcox Lumber Co.
Duluth—Barcol OVERdoors of Duluth
Fairmont—Christensen Lumber & Millworks, Inc.
Hastings—J. Fred Scholl
Lake Elmo—Bernard Friedrich
Minneapolis—Barber-Colman Company
Owatonna—Haberman Woodworking & Supplies
Plato—Pinske Lumber & Supply Co.
St. Cloud—St. Cloud Metal Window Co., Inc.
Thief River Falls—Prichard Bros. Co.

MISSISSIPPI
(New Orleans)

MISSOURI
Columbia—Barcol OVERdoors of Central Missouri
Kansas City—Barber-Colman Company
St. Joseph—Barcol OVERdoors of St. Joseph
St. Louis—Barcol OVERdoors of St. Louis

MONTANA
Billings—Billings Sash & Door Co.
Butte—Practical Builders Supply Co.
Great Falls—Northwest Steel. Inc.

NEBRASKA
Hastings—The Gellatly Co.
(Denver, St. Joseph, Sioux City)

NEVADA
(Boise, Salt Lake City)

NEW HAMPSHIRE
Keene—Keene Garage Door Co.
Laconia—Barber-Colman OVERdoors of Laconia

NEW JERSEY
Highland Park—Rutgers Overdoor & Operator Co.
Paterson (Westwood)—Harold R. Shuttleworth
Wyckoff—R. C. Ward
(Philadelphia)

NEW MEXICO
Albuquerque—Sandberg Sales Co.
Roswell—Builders Block & Stone Co., Inc.

NEW YORK
Albany—Edward P. Jennings, Jr.
Buffalo—Barber-Colman Company
Floral Park, L.I.—Eugene J. Constantin
Huntington, L.I.—Wilfrid Constantin
Lakewood—Lakewood Supply Co.
New York City—Barber-Colman Company
Olean—George Goranson
Poughkeepsie—Barcol OVERdoors of Poughkeepsie
Rochester—Myron W. Greene
South Wales—Luss Utility Shop
Syracuse—B. R. Johnson & Son
Tarrytown—Charles Margotta & Co.
Utica—E. J. Macner Sales Co.
(Paterson (Westwood) N.J.)

NORTH CAROLINA
Charlotte—Maxson-Betts Co.
Raleigh—Delph Hardware & Specialties Co.
Winston-Salem—Long Building Specialties Co.
(Roanoke, Va.)

NORTH DAKOTA
Fargo—Dakota Sash & Door Co.
(Aberdeen, S.D.)

OHIO
Canton—Barcol OVERdoors of Canton
Cincinnati—Barcol OVERdoors of Cincinnati
Cleveland—Barber-Colman Company
Elyria—H. H. Wellert
Columbus—J. L. Hughes Electric Co.
Lima—Lima Lumber Company
Toledo—D. A. Valo Associates
Youngstown—Briggs-Jones, Inc.
(Ft. Wayne, Ind., Huntington, Parkersburg, Wheeling, W. Va.)

OKLAHOMA
Tulsa—Barcol OVERdoors of Tulsa
(Amarillo)

OREGON
Portland—Pella Sales Co.
(Boise, Spokane)

PENNSYLVANIA
Bradford—A. Miller & Sons Lumber Co.
Brookville—Wm. H. Fleming, Jr.
Clarion—Rhea Lumber Company
Johnstown (Holsopple)—Joe Miller & Son
Kittanning—Harold C. Graham
Philadelphia—Herbert G. Pitts
Pittsburgh—Barber-Colman Company
Uniontown—Hankins-Paulson Co.
(Buffalo, Paterson (Westwood))

RHODE ISLAND
Providence (Centerdale)—Chapman-King Co.

SOUTH CAROLINA
Columbia—Allied Specialties Sales
Greenville—Weeks Manufacturing Co.
(Augusta, Ga., Charlotte, N.C.)

SOUTH DAKOTA
Aberdeen—Dakota Sash & Door Co.
Huron—Huron Sash & Door Co.
Sioux Falls—Barcol OVERdoors of Sioux Falls
(Sioux City, Ia.)

TENNESSEE
Bristol—Milton B. Abercrombie
Chattanooga—Barcol OVERdoors of Chattanooga
Knoxville—Standard Glass Co., Inc.
Nashville—Crawford Sales Co.

TEXAS
Amarillo—Panhandle Engineers & Contractors
Lubbock—Sterling Building Materials

UTAH
Salt Lake City—Building Specialties Corp.

VERMONT
(Framingham, Mass.)

VIRGINIA
Richmond—Sash, Door & Glass Corp.
Roanoke (Salem)—Charles E. Via, Jr., Inc.
Winchester—Barcol OVERdoors of Winchester
(Bristol, Tenn., Washington, D.C.)

WASHINGTON
Seattle—Barcol OVERdoors of Seattle
Spokane—Spokane Sash & Door Co.
(Portland)

WEST VIRGINIA
Charleston—Ira F. Kuhn Co.
Clarksburg—Hartland Planing Mill Co.
Huntington—Minter Homes Corp.
Morgantown—General Woodworking Co.
Parkersburg—Wilson Bros.
Wheeling—H. L. Seabright Co.

WISCONSIN
Eau Claire—The Spencer Corp.
Green Bay—Northern Metal & Roofing Co.
Janesville—Barber-Colman OVERdoors of Rock Co.
LaCrosse—Barcol OVERdoors of LaCrosse
Menomonie—Hanson Construction Co.
Madison—Paul M. Treichel Co.
Milwaukee—J. F. Cook Co.
Oshkosh—Barcol OVERdoors of Oshkosh
Sheboygan—Barcol OVERdoors of Sheboygan
Wausau—Barcol OVERdoors of Wausau
(Dubuque, Ia., Duluth, Minneapolis, Rockford, Ill.)

WYOMING
(Billings, Denver, Salt Lake City)

CANADA
Calgary—A. B. Cushing Mills, Ltd.
Edmonton—Barcol OVERdoors of Edmonton
Montreal—Barcol OVERdoors of Montreal
Toronto (Weston)—Preston Steel Products
Vancouver—Top Flite Overhead Door Co.
Winnipeg—Floline Co. of Canada

MARITIME PROVINCES
Dartmouth—J. M. McDougall & Sons, Ltd.

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